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A Child With Prolonged Fever and Hepatosplenomegaly Caused by Calodium Hepaticum

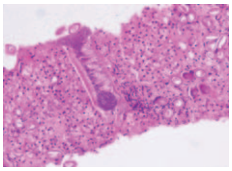

FIGURE 1. Liver biopsy demonstrating presence of numerous oval eggs with characteristic striated shells and adult worm of Capillaria hepatica. Mild inflammation with eosinophils are also seen.

A 3-year-old boy from India presented with recurrent high-grade fever since 2 years of age. Previous investigations for common tropical infections were non-contributory. There was moderate and firm hepatosplenomegaly on examination. Laboratory data showed hemoglobin 8.5 (12–14) g/dL, total leukocyte count 19,700 (4000–11,000)/mm^3, platelets 360,000 (150,000–400,000)/mm^3, aspartate aminotransferase 254 (0–40) IU/L and alanine aminotransferase 230 (0–40) IU/L. Bilirubin, albumin and international normalized ratio was normal. Abdominal sonogram showed hepatosplenomegaly. A liver biopsy established the diagnosis of hepatic capillariasis (Fig. 1). Hepatic capillariasis is caused by the nematode Capillaria hepatica also called calodium hepaticum and humans are accidental hosts (1,2). The commonest presentations include fever, abdominal pain, reactive airway disease and loose stools (3,4). Liver biopsy is the gold standard for diagnosis (1). Albendazole was started at 20 mg/kg per day for 4 weeks followed by multiple periodic courses. Oral Prednisolone was started at 2 mg/kg and after tapering, is being continued at 5 mg/day for suppressing the inflammatory response. On follow up, he is afebrile with normal liver function, but persistent hepatosplenomegaly. Patients can develop hepatic fibrosis, as Kupffer cells get stimulated by disintegrated products from the parasitic wall and this could be the reason for the persisting hepatosplenomegaly (1,3,4).

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Parental consent obtained for publication of the report. No recognisable images of the patient used in the manuscript.

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Chronic Iron Deficiency Anaemia Caused by Blue Rubber Bleb Syndrome

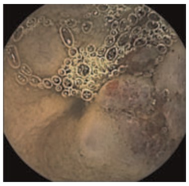

FIGURE 1. Wireless capsule endoscopy image showing mid intestinal vascular protrusions

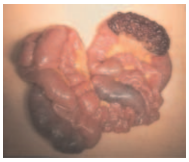

FIGURE 2. Intraoperative image showing a mid intestinal vascular malformation (same lesion as figure 1)

A 12-year-old girl was referred for investigation of chronic iron deficiency anaemia requiring blood transfusions, and mild abdominal pain. Oesophago-gastro-duodenoscopy and colonoscopy were normal, as were inflammatory markers, faecal calprotectin and coeliac screening. Abdominal MRI showed segmental mucosal thickening with an atypical enhancement pattern. Abdominal X-ray was performed to confirm passage of a patency capsule, and showed phleboliths. Wireless capsule endoscopy (WCE) showed mid intestinal vascular protrusions with venous appearance and superficial erosions (Fig. 1). Multidisciplinary consensus for minimal laparotomy with intraoperative enteroscopy was obtained due to the size of the lesion. Intraoperative findings showed a 7 cm long mid intestinal vascular malformation that was resected (Fig. 2). Histopathology demonstrated a 5 cm × 3 cm intestinal segment with the proliferation of vascular channels from 1 to 5 mm filling the submucosa and replacing muscularis propria, extending into the serosa. The investigations suggested a diagnosis of Blue Rubber Bleb Syndrome (BRBS).

BRBS is a rare genetic disorder of venous malformations affecting the gastrointestinal (GI) tract, with only 200 reported cases worldwide. A recent paediatric case series recommended that management should be individualised, based on symptoms and organ involvement. In severe forms, BRBS can require endoscopic or surgical interventions, while systemic medical treatment may offer an alternative in multifocal lesions.

Isoldi S, et al. Diagnosis and management of children with Blue Rubber Bleb Nevus Syndrome: a multi-center case series. *Dig Liv Dis* 2019:1537–46.

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Author Contributions: Ela Owen: Medical student under Dr Auth's supervision who liaised with relevant departments to collate the photos, and obtained the patient's consent for the photos to be used for academic purposes. Colin T. Baillie: Consultant Paediatric Surgeon who excised the BRBS small bowel lesion. William Simmons: Specialist Registrar in Paediatric and Perinatal Pathology who photographed the macroscopic specimens. Rachael McGhee: Paediatric Gastrointestinal Physiologist who carried out the capsule endoscopy imaging and compiled the capsule endoscopy photos. Louise Phillips: General Paediatric Consultant at the patient's local hospital (Glan Clwyd Hospital) who referred the patient to Alder Hey for further investigation of iron deficiency anaemia. Marcus K.H. Auth: Paediatric Gastroenterology Consultant leading the care for the patient described in this submission.

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Submissions for the Image of the Month should include high-quality TIF endoscopic images of unusual or informative findings. In addition, 1 or 2 other associated photographs, such as radiological or pathological images can be submitted. A brief description of no more than 200 words should accompany the images. Submissions are to be made online at *www.jpgn.org*, and will undergo peer review by members of the NASPGHAN Endoscopy and Procedures Committee, as well as by the *Journal.*

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